CLAIMS

1. Method for monitoring electric users (C), in particular household appliances belonging to a same household environment and connected to a network (R), wherein at least an electric user (C) is provided, comprising an electronic control system having a microcontroller, memory means and interface means, said electronic control system being programmed for generating information which relate to operating conditions of the electric user (C), said information being made available outside said control system through said interface means, the method being characterized by the following steps:

- the electronic control system provides for generating diagnostic information, being representative of the efficiency status of components of the user (C) and/or statistical information, being representative of the wear status of components of the user (C),
- the electronic control system provides for storing, within said memory means, said information,
- the electronic control system provides for making the stored diagnostic and/or statistical information available outside said control system, through said interface means.

2. Method, according to claim 1, characterized in that said control system provides for updating in the time the diagnostic and/or statistical information stored within said memory means.

3. Method, according to claim 1, characterized in that said diagnostic information relate to the operation quality of said electric user (C), said operation quality being expressed through the value of a set of diagnostic parameters typical of the user (C).

4. Method, according to claim 1, characterized in that said statistical information relate to an history of the user (C) from a viewpoint of the performed operations and/or functions and/or usage procedures.

5. Method, according to claim 1 or 2, characterized in that the stored diagnostic and/or statistical information are made available through a monitoring device (F) which can communicate with said electronic control system through said interface means.

6. Method, according to claim 1, characterized in that said control system also

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provides for generating functional information, being representative of the current operating status of the electric user (C).

7. Method, according to claim 5, characterized in that said control system provides for transmitting the stored diagnostic and/or statistical information on a network (R) and that said monitoring device (F), which is interfaced with said network (R), provides for selecting, picking up, organizing and making explicit the diagnostic and/or statistical information being transmitted on said network (R).

8. Method, according to claim 5 and 6, characterized in that said control system provides for transmitting said functional information on a network (R) and that said monitoring device (F), which is interfaced with said network (R), provides for selecting, picking up, organizing and making explicit the functional information transmitted on said network (R).

9. Method, according to at least one of the previous claims, characterized in that said monitoring device (F) provides for storing and/or updating within its own memory means (ME) the information picked up from said network (R), before making them explicit.

10. Method, according to at least one of the previous claims, characterized in that said diagnostic and/or statistical and/or functional information are made explicit within the household environment.

11. Method, according to at least one of the previous claims, characterized in that at least said diagnostic and/or statistical information are made explicit or transmitted outside the household environment.

12. Method, according to claim 12, characterized in that said diagnostic and/or statistical information are transmitted to a service and/or preventive maintenance center (H) for said electric user (R).

13. Method, according to at least one of the previous claims, characterized in that the selection is provided of the type of information to be made explicit through said monitoring device (F).

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18. Method, according to at least one of the previous claims, characterized in that the selection is provided of the transmission procedure for said diagnostic and/or statistical information at remote level.

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16. Method, according to claim 13, characterized in that the service activity of said center (H) is based on said diagnostic information.

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17. Method, according to claim 13, characterized in that the preventive maintenance activity of said center (H) is based at least on said statistical information.

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18. Method, according to the claim 13, characterized in that the transmission of said diagnostic and/or statistical information to said center (H) is realized through a telephone line.

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19. Method, according to the claim 13, characterized in that the transmission of said diagnostic and/or statistical information to said center (H) is realized through Internet.

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20. System for monitoring electric users (C), in particular household appliances belonging to a same household environment and connected to a network (R), wherein at least an electric users (C) is provided, comprising an electronic control system having a microcontroller, memory means and interface means, said electronic control system being programmed for generating information which relate to operating conditions of the electric user (C), said information being made available outside said control system through said interface means, characterized in that said electronic control system is programmed for generating and storing within said memory means at least diagnostic information, being representative of the efficiency status of components of the user (C) and/or statistical information, being representative of the wear status of components of the user (C), and that means (F) are provided for making the stored diagnostic and/or statistical information available outside said control system, through said interface means.

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21. System, according to claim 20, characterized in that said means comprises said electronic control system of said electric user, being programmed for that purpose.

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22. System, according to claim 20, characterized in that said means comprises a monitoring device (F) capable of communicating with said electronic control system

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through said interface means.

23. System, according to claim 20, characterized in that said control system is programmed for updating in the time the diagnostic and/or statistical information stored within said memory means.

24. System, according to claim 20, characterized in that said diagnostic information relate to the operation quality of said electric user (C), said operation quality being expressed through the value of a set of diagnostic parameters typical of the user (C).

25. System, according to claim 20, characterized in that said statistical information relate to an history of the user (C) from a viewpoint of the performed operations and/or functions and/or the usage procedures.

26. System, according to claim 20, characterized in that said control system is also programmed for generating functional information, being representative of the current operating status of the electric user (C).

27. System, according to claim 22, characterized in that said monitoring device (F) comprises means (N,I,MP,V,K,L,M) for selecting, picking up, organizing and making explicit the stored diagnostic and/or statistical information.

28. System, according to claim 22, characterized in that said control system is programmed for transmitting the stored diagnostic and/or statistical information on a network (R) and that said monitoring device (F) is interfaced with said network (R).

29. System, according to claims 27 and 28, characterized in that said monitoring device (F) comprises its own memory means (ME) for storing the diagnostic and/or statistical transmitted on said network (R).

30. System, according to claim 27, characterized in that said monitoring device (F) comprises a display device (V).

31. System, according to claim 27, characterized in that said monitoring device (F) comprises transmission means (L,M), for transmitting said stored information to a remote site, in particular through Internet.

32. System, according to claim 30, characterized in that said monitoring device (F)

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comprise interaction means (K) for selecting the type of information to be displayed on said display device (V).

33. System, according to claim 31, characterized in that said monitoring device (F) comprise interaction means (K) for activating the transmission of said stored information.

34. System, according to claim 31, characterized in that said transmission means (L,M) comprise a modem.

35. An electric user, in particular a household appliance, for the use in the method according to any of claims 1 to 19 or the system according to any of claims 20 to 34 comprising an electronic control system having a microcontroller, memory means and interface means, said electronic control system being programmed for generating and storing within said memory means at least diagnostic information, being representative of the efficiency status of components of the user (C) and/or statistical information, being representative of the wear status of components of the user (C), and means for making the stored information available outside said control system, through said interface means.

36. A monitoring device, for the use in the method according to any of claims 1 to 19 or the system according to any of claims 20 to 34 comprising:

- interface means (I);
- means for selecting (V,L,M,R,K,MP), picking up (N), organizing and making explicit said stored diagnostic and/or statistical information.